

CLIMATE NEWS

From Sheldon Whitehouse, Barbara Boxer, and Jeff Merkley
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Climate Change Contributes to Water Stress and Wildfires in Southwest



Climate change is affecting the water supply in the fast-growing and naturally dry Southwest. Recent drought in the region has been unusually severe relative to the droughts of the last century, and recent flows in the four major drainage basins of the Southwest have been lower than their 20th-century average, according to a report released this year as part of the Draft Third National Climate Assessment. According to the assessment, the period since 1950 in the Southwest has been hotter than any comparably long time in at least 600 years. A separate report by Climate Central found that Arizona is the fastest-warming of the lower 48 states, having warmed at a rate of 0.6 degree Fahrenheit per decade from 1970 to 2011. The increasing heat has contributed to a decline in the water flow of the Colorado River, which brings water to more than 30 million people in the Southwest, including Los Angeles and Las Vegas. Climate change is also contributing to changes in wildfire activity in the region. According to a report from the Arizona Department of Forestry, there are fewer wildfires, but the ones that occur are far larger. (ClimateWire)

U.S. and China Announce Joint Climate Change Initiatives

U.S. Special Envoy for Climate Change Todd Stern and his Chinese counterpart, Xie Zhenhua, announced last week that the U.S. and China will collaborate on five initiatives aimed at reducing their contribution to climate change. The initiatives include cutting emissions from heavy-duty vehicles; boosting deployment of carbon capture and storage technology; increasing the efficiency of buildings, industry and transportation in both countries; improving greenhouse gas data collection; and promoting smart grid technology. The announcement came after last month's U.S.-China agreement to work together to amend the Montreal Protocol to phase down the production and use of heat-trapping hydrofluorocarbons (HFCs). It also follows the rollout of President Obama's plan to tackle climate change, in part by increasing engagement with other countries. Stern predicted that increased cooperation between the U.S. and China would have "a very positive overall impact on the tenor and mood of international actions and discussions and negotiations in a whole variety of forums." The U.S. and China are the world's top two greenhouse gas emitters. (E&E)

Coastal Ecosystems Play Vital Role in Climate Adaptation

A new study highlights the important role of natural coastal defenses in protecting communities from extreme weather, sea-level rise, and other effects of climate change. Natural features like mangroves, wetlands, and oyster beds currently buffer about 67 percent of the nation's seashores from ocean forces like wind and waves. If they disappear, more than one million additional Americans and billions of dollars in property value will be vulnerable to damage, according to the study, published this week in the journal *Nature Climate Change*. "Habitat loss would double the extent of coastline highly exposed to storms and sea-level rise, making an additional 1.4 million people now living within one kilometer of the coast vulnerable," the paper states. Ecosystem depletion would have the largest effect on the East Coast and Gulf Coast. The study's authors state that, by quantifying where and to what extent habitats reduce the exposure of vulnerable populations and property, the study is the first to identify where conservation and restoration of coastal habitats is most critical for protecting lives and property. (ClimateWire)

Climate Change Will Increase Energy Breakdowns, DOE Warns

The nation's energy system is vulnerable to increasingly severe and costly weather events driven by climate change, according to a new report from the Department of Energy. Every corner of our nation's energy infrastructure will be stressed in coming years by more intense storms, rising seas, higher temperatures and more frequent droughts. The effects are already being felt, the report says. Power plants are shutting down or reducing output because of a shortage of cooling water. Barges carrying coal and oil are being delayed by low water levels. Floods and storm surges are inundating ports, refineries, pipelines and rail yards. Windstorms and wildfires are felling transformers and transmission lines. "We don't have a robust energy system, and the costs are significant," said DOE official Jonathan Pershing. "The cost today is measured in the billions. Over the coming decades, it will be in the trillions. You can't just put your head in the sand anymore." The report includes a number of recommendations to reduce the energy system's vulnerability, including reducing demand from energy consumers and making the transmission grid more resilient. (NY Times)

